

# Electric Transmission Energy Summit April 22, 2008



**NorthWestern**<sup>TM</sup>  
**Energy**

*Delivering a Bright Future*

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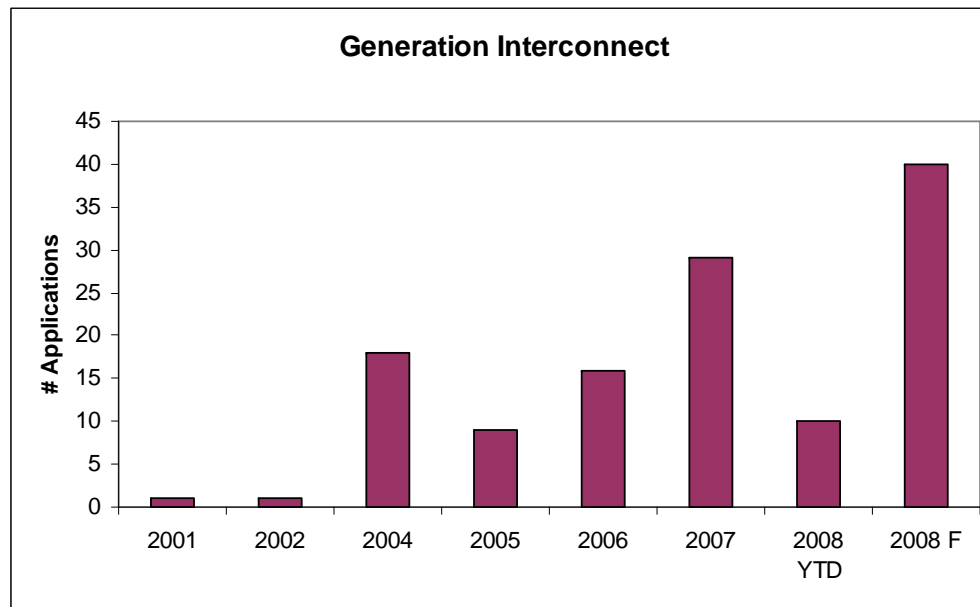
- **Interconnection Requirements & Procedures**
- **Overview NWE transmission**
- **Constraints**
- **Transmission Needs**

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- **Interconnection Requirements & Procedures**
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# Interconnection

- **Interconnection vs. Transmission Service**
  - » FERC
  - » Differences
- **Application (MW, Online date and technical data)**
  - » Fee
  - » Queue Priority by Application Date



# Interconnection

## ■ Study

- » High Level and Detail Reliability Studies
- » Facility Study
- » Restudy potential

## ■ Interconnection Agreement

- » Does not constitute a request for transmission service
- » Does not imply that you will receive any transmission required to deliver the generation output to load

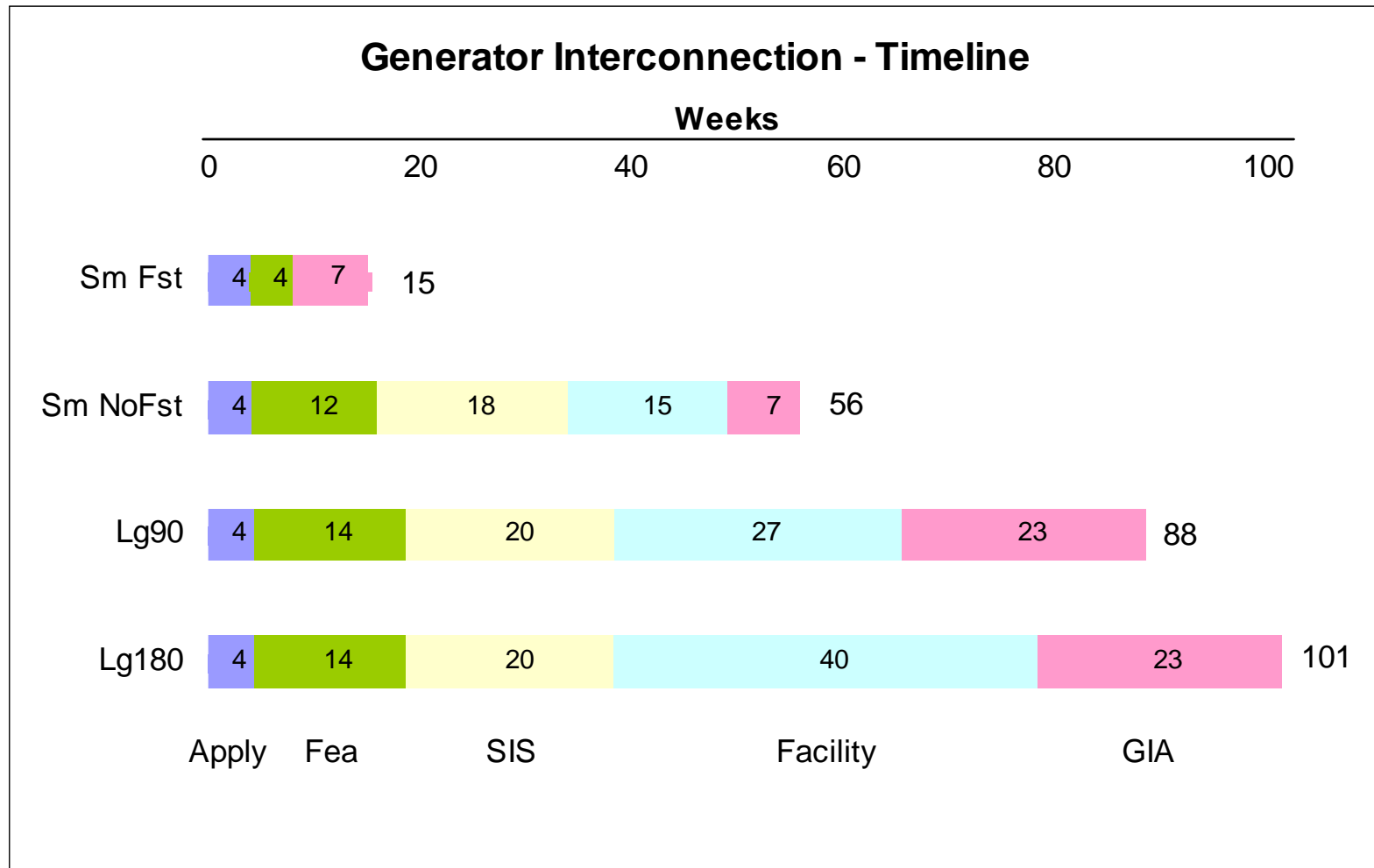
## ■ Construction

- » Generation Facility
- » Transmission Mitigation

## ■ More detail on NWE OASIS website

- » <http://www.oatioasis.com/nwmt>

# Interconnect Timelines - Example

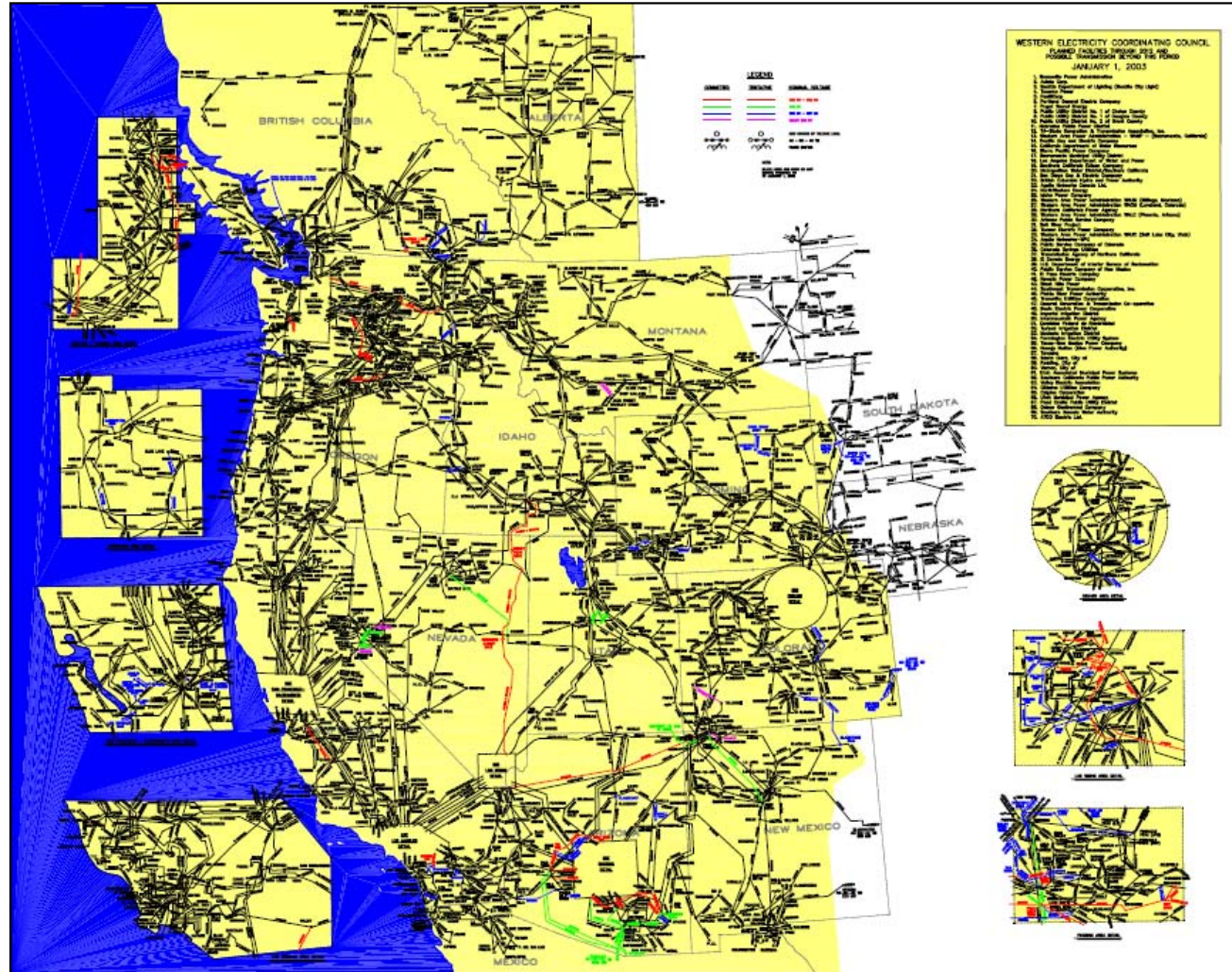


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# Operate In An Extensive Network

- WECC area
- NWPP area
- Sub-Regional areas
- State
- Local



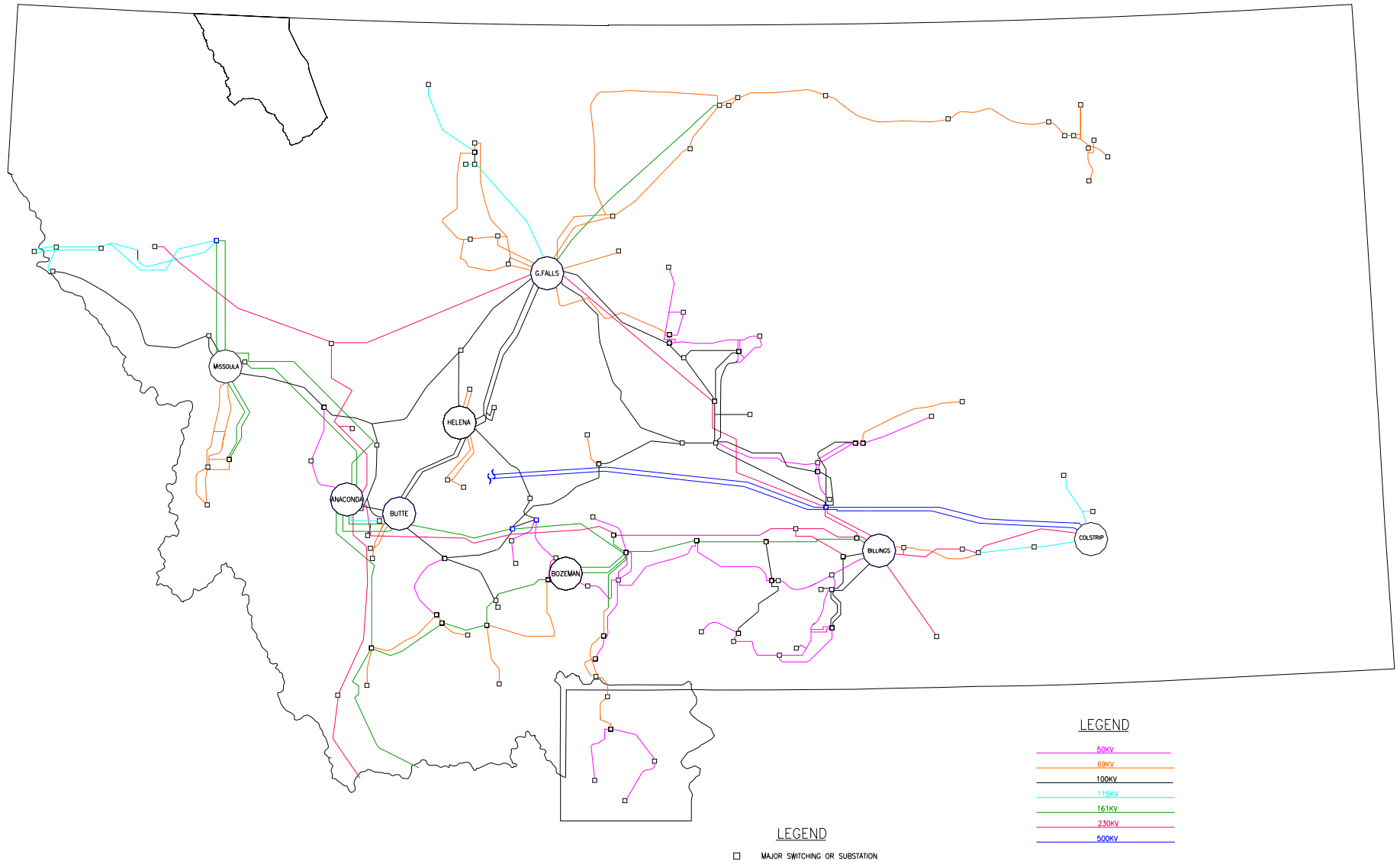


# Regulation & Requirements

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- Federal
- Regional
- State
- Reliability
- Customer Needs

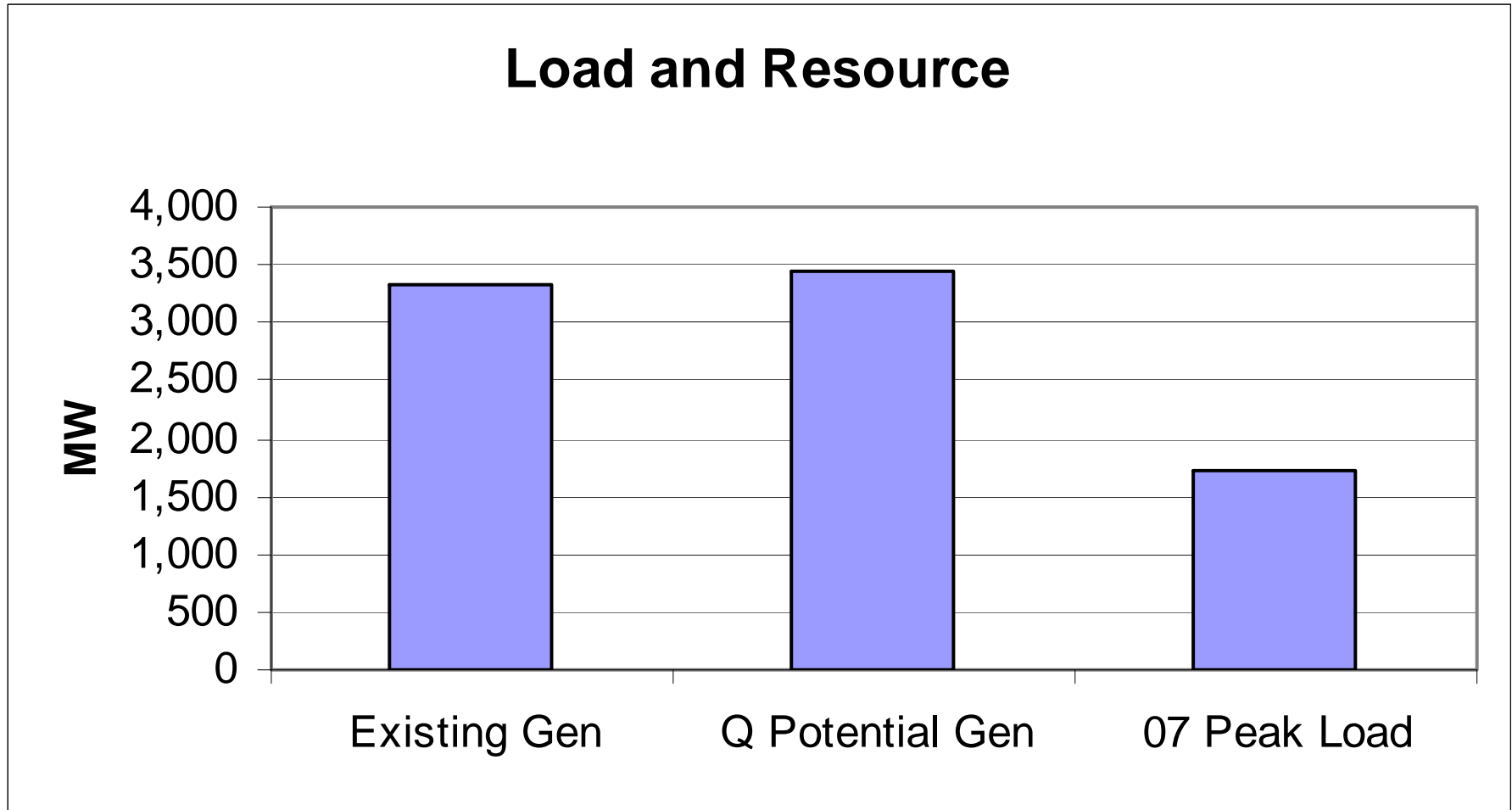
# NWE Transmission



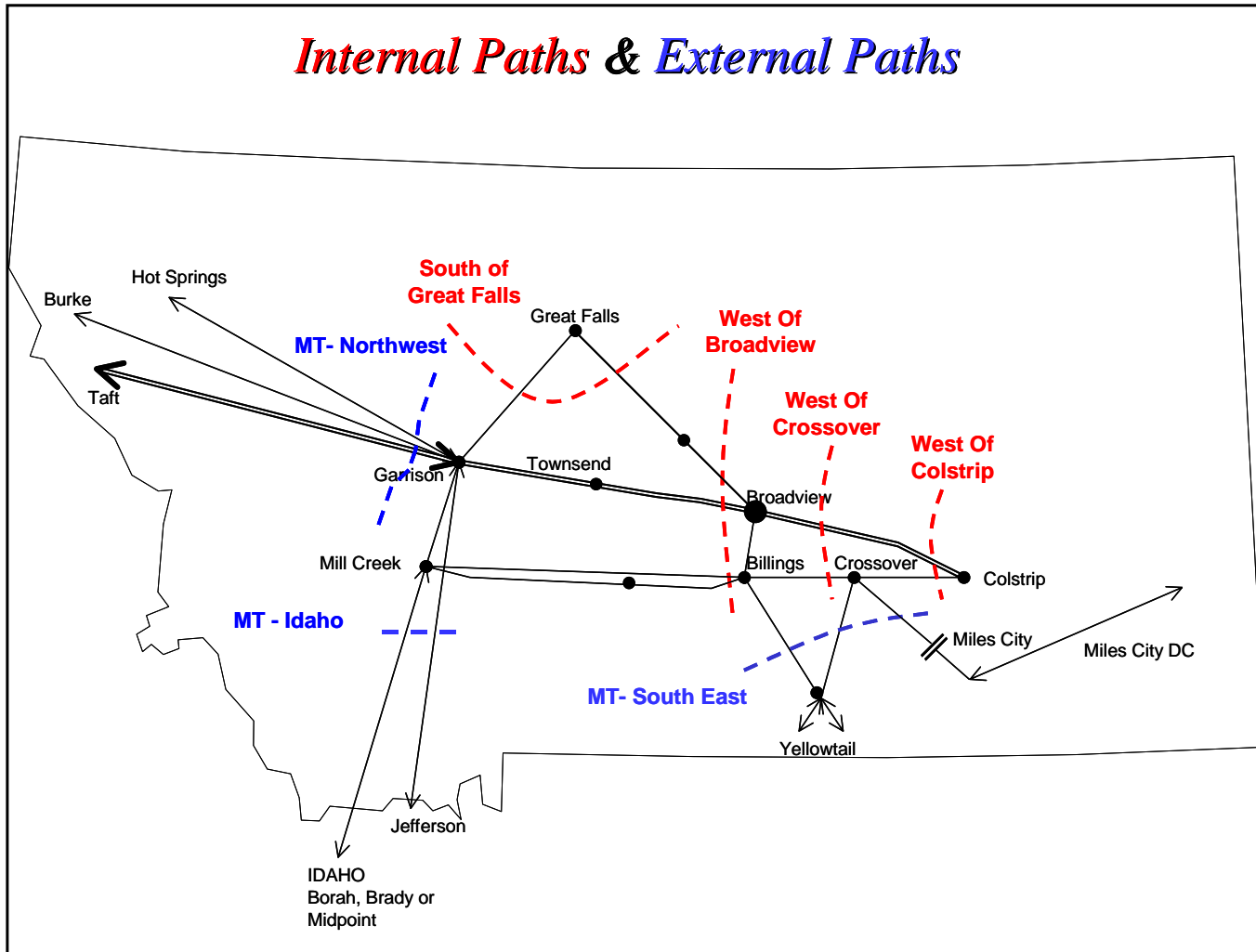
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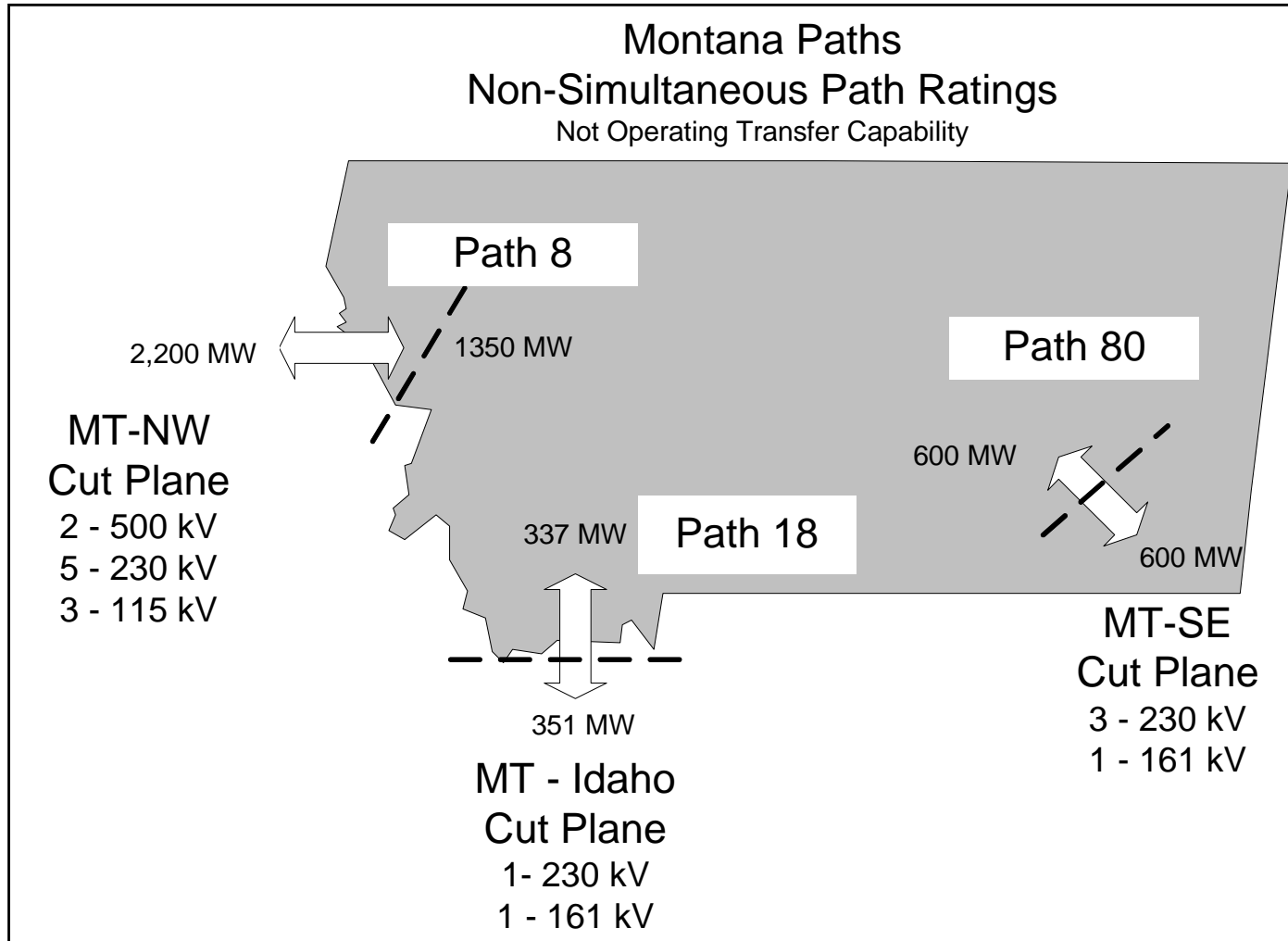
# Why Is New Transmission Needed?



# Paths



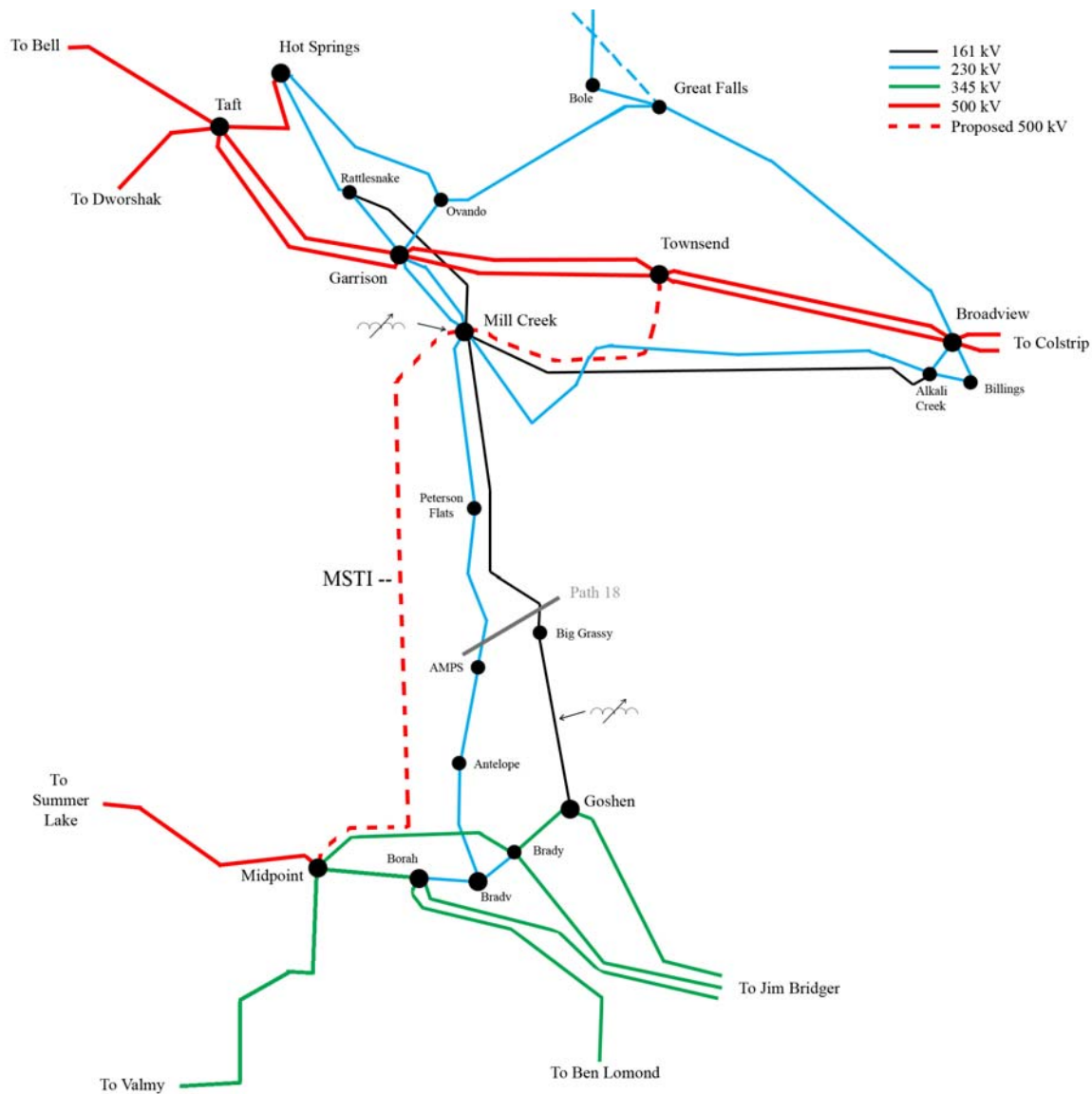
# Paths



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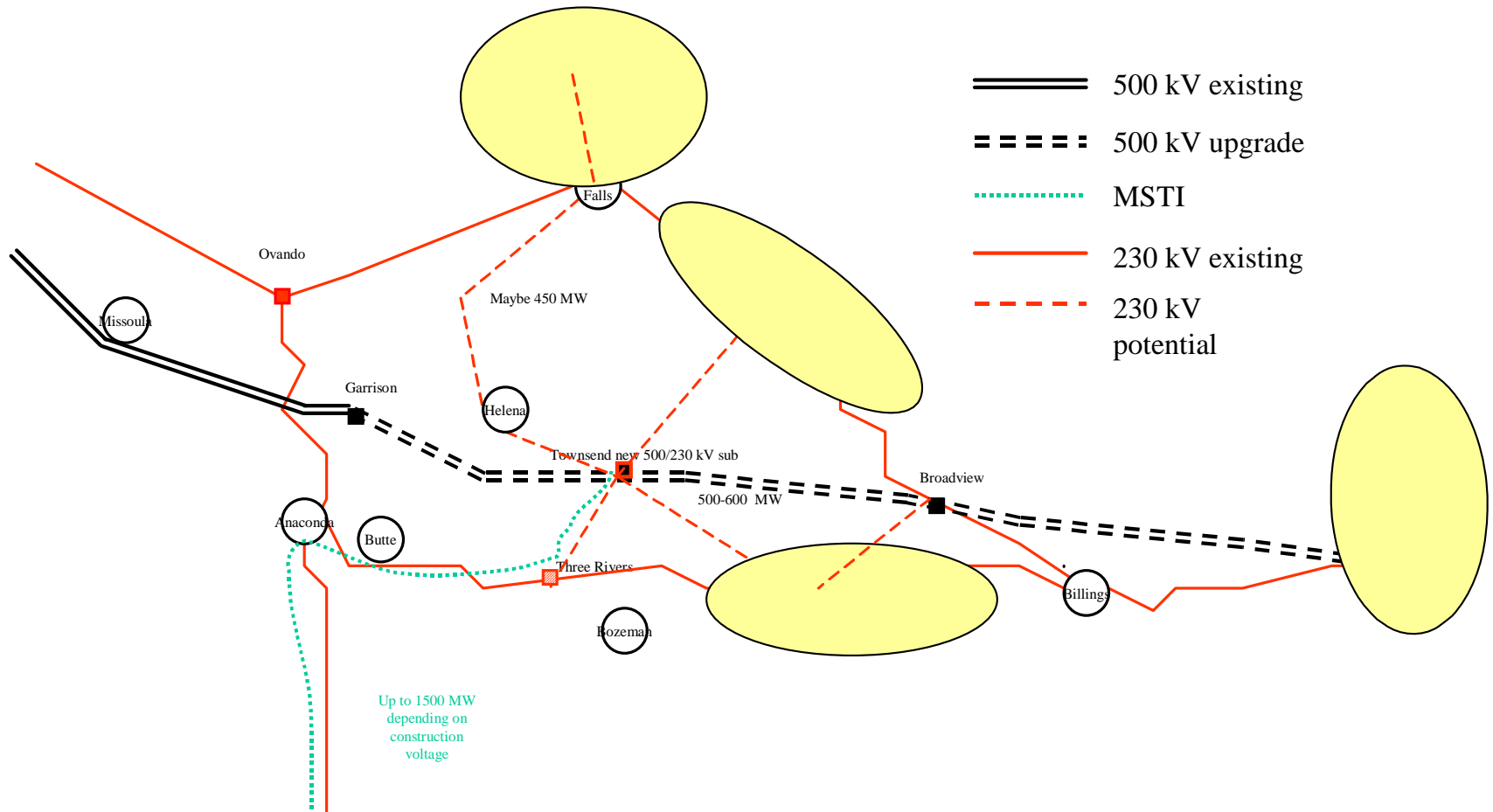
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# MSTI – Example Route



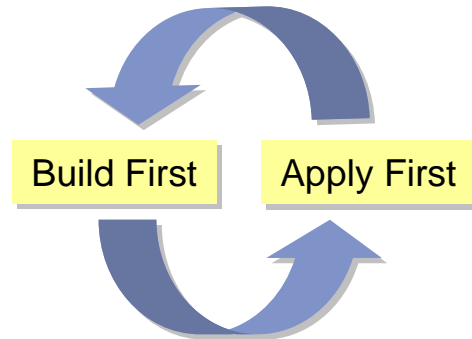


# Internal Collector System - EXAMPLES



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## ■ Build Out Conundrum



## ■ Encourage Participation

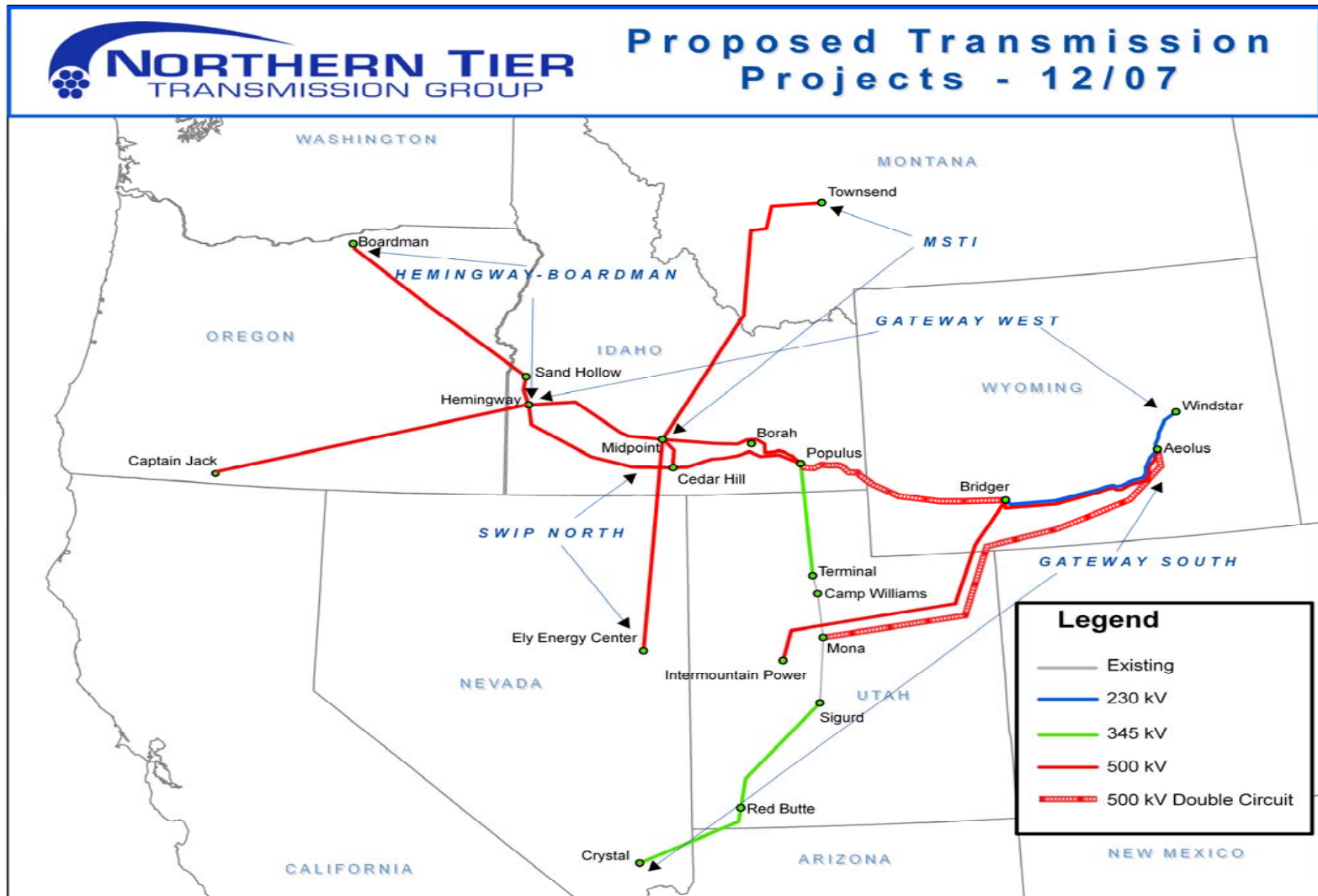
## ■ Example of potential options

- » New 230 kV - approx 450 MW
- » 500 kV Upgrade - approx 500 MW

## ■ Free Rider

- » See “NorthWestern’s Interconnect Cost Allocation and Refund Methodology” posted on NWE OASIS

# External “Collector” System for MSTI





# Questions?